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Atterney Docket No. 5051.621

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

În re: Narayan et al.

Application Serial No.: 10/723,842

Filed: November 26, 2003

For: Methods of Forming Three-Dimensional Nanodot Arrays in a Matrix

Date: February 10, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. § 1.97(b)

Sir:

Attached is a form PTO-1449, together with a copy of each of the identified document(s). It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. § 1.56 and Section 609 of the MPEP.

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(b), within three months of the filing date of the above-referenced application or before the mailing of a first Office Action on the merits, whichever event occurs last. Therefore, no fee is believed due. However, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account No. 50-0220.

Respectfully submitted,

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"Express Mail" mailing label number: <u>EV381447911US</u> Date of Deposit: February 10, 2004 I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Sloan Smith

.FORM PTO-1449 U.S. Department of Commerce Patent and Trademark Office					Attorney Docket Number 5051.621			Serial No. 10/723,842		
LIST OF DOCUMENTS CITED BY APPLICANT Use several sheets if necessary)										
HB 1 0 2004 w					Applicants: Narayan et al.					
					Filing Date November 26, 2003			Group Unknown		
	U. S. PATENT DOCUMENTS									
Examiner Initial		Document Number	Date		ame	Class	Subclass	Filing Date if Appropriate		
			FOREI	GN PATENT I	DOCUMENTS					
		Document Number	Date	Со	untry	Class	Subclass	Translation Yes No		
					<u> </u>					
		OTHER DOC	UMENTS (Ir	ncluding Author	r, Title, Date, Per	rtinent Pages	, Etc.)			
<u>-</u>	1.		Alivisatos et al., "Semiconductor Clusters, Nanocrystals, and Quantum Dots," <i>Science</i> 271 (5251): 933-937 (Feb. 16, 1996).							
	2.	Awschalom et al., "Macroscopic Quantum Effects in Nanometer-Scale Magnets," <i>Science</i> 258 (5081): 414-421 (Oct. 16, 1992).								
	3.		Black et al., "Spin-Dependent Tunneling in Self-Assembled Cobalt-Nanocrystal Superlattices," Science 290: 1131-1134 (Nov. 10, 2000).							
	4.	Carpenter et al., "Iron nanoparticles as potential magnetic carriers," Journal of Magnetism and Magnetic Materials 225: 17-20 (2001).								
	5.		Helman et al., "Tunneling of Spin-Polarized Electrons and magnetoresistance in Granular Ni Films," <i>Physical Review Letters</i> 37 (21): 1429-1432 (Nov. 22, 1976).							
	6.		Koo et al., "Current-controlled bi-stable domain configurations in Ni ₈₁ Fe ₁₉ elements: An approach to magnetic memory devices," <i>Applied Physics Letters</i> 81(5): 862-864 (July 29, 2002).							
	7.		Lambeth et al., "Media for 10 Gb/in. ² hard disk storage: issues and status (invited)," <i>J. Appl. Phys.</i> 79(8): 4496-4501 (April 15, 1996).							
	8.	MacLachlan et al., "Shaped Ceramics with Tunable Magnetic Properties from Metal-Containing Polymers," <i>Science</i> 287 : 1460-1463 (Feb. 25, 2000).								
	9.	Makeev et al., "Simulations of Atomic Level Stresses in Systems of Buried Ge/Si Islands," <i>Physical Review Letters</i> 86 (24): 5542-5545 (June 11, 2001).								

EXAMINER *EXAMINER

DATE CONSIDERED

Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	U.S. Department of Commerce and Trademark Office	Attorney Docket Number 5051.621	Serial No. 10/723,842					
LIST OF DOC	UMENTS CITED BY APPLICANT		<u>!</u> :					
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en e		Filing Date November 26, 2003	Group Unknown					
	10. Mazaleyrat et al., "Ferromagnetic nanocomposites," <i>Journal of Magnetism and Magnetic I</i> 253-259 (2000).							
11.	Middleton et al., "Collective Transport in Arrays of Small Metallic Dots," <i>Physical Review Letters</i> 71(19): 3198-3201 (Nov. 8, 1993).							
12.	Moodera et al., "Optimum tunnel barrier in ferromagnetic-insulator-ferromagnetic tunneling structures," <i>Appl. Phys. Lett.</i> 70 (22): 30503052 (June 2, 1997).							
13.	Letters 81(1): 171-173 (July 1, 2002). Peng et al., "Characteristic transport properties of CoO-coated monodispersive Co cluster assemble Physical Review B 60(3): 2093-2010 (July 15, 1999).							
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16.	Sheng et al., "Hopping Conductivity in Granular Metals," <i>Physical Review Letters</i> 31 (1): 44-47 (2, 1973).							
17.	Stahl et al., "Electronic and Magnetic Properties of Monodispersed FePt Nanoparticles," <i>Adv. Mate</i> 14 (1): 24-27 (Jan. 4, 2002).							
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